



### CONTACT

Market information  
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## Unmatched fire-proof safety

The ENERGYFLEX® B2ca patented solar cable is designed to have outstanding reaction to fire, allowing it to be combustible but with very little burning.

## STANDARDS

**Producto** EN 50575; EN 50618; IEC 60228; IEC 62930

## DESIGN

Single core fire resistance solar cable with low smoke, halogen free, crosslinked insulation and sheath.

### 1. Conductor

Stranded tinned copper wires class 5 acc. IEC 60228

### 2. Insulation

Cross-linked halogen-free rubber  
 Colour: white

### 3. Sheath

Cross-linked halogen-free fire retardant rubber  
 Colour: black

Example of marking: ENERGYFLEX® B2ca USE < HAR > H1Z2Z2-K 62930 IEC 131 1 x S mm<sup>2</sup> 1.5/1.5 (1,8) kV DC lynxeo 269 MADE IN FRANCE B2ca-s1,d2

## FEATURES

ENERGYFLEX® B2ca cables are dedicated to the photovoltaic system direct current (D.C.) side with a nominal D.C. voltage of 1.5 kV and a maximum D.C. voltage of 1.8 kV. Cable suitable to be used with Class II equipment.

These cables are suitable for permanent outdoor long-term use, under variable and harsh climate conditions. They are designed and tested to operate at a normal maximum conductor temperature of 90°C and for 20,000 hours up to 120°C. Therefore, the expected period use is 30 to 40 years under normal usage conditions (lifetime acc. to Arrhenius Diagram).

ENERGYFLEX® B2ca cables have CPR classification: B2ca-s1,d2,a1 according to EN 50575

- B2ca: combustible but very little burning
- s1: very low smoke production (best in class)
- d2: some flaming droplets
- a1: very low acidity of smoke (best in class)



Flexibilidad del conductor  
**Flexible, Clase 5**



Libre de halógenos  
**IEC 60754-1**



Tensión nominal de servicio Uo/U  
**1.0/1.0 (1.2) kV AC  
 1.5/1.5 (1.8) kV DC**



No propagador del incendio  
**EN 50575**



No propagación de la llama  
**IEC 60332-1-2**



Densidad de los humos  
**IEC 61034-2**



Corrosividad de los gases  
**Baja IEC 60754-2**



Resistencia a la intemperie  
**Excelente**

**CHARACTERISTICS****Características de construcción**

Construction type	
Material del conductor	Cobre estañado
Flexibilidad del conductor	Flexible, Clase 5
Aislamiento	Cross-linked halogen free rubber
Cubierta exterior	Cross-linked halogen free rubber
Libre de halógenos	IEC 60754-1

**Características dimensionales**

Sección del conductor	6 mm <sup>2</sup>
Nominal conductor diameter	2,9 mm
Nominal insulation thickness	0,7 mm
Nominal outer sheath thickness	1,5 mm
Diámetro exterior mínimo	6,8 mm
Diámetro exterior nominal	- mm
Diámetro exterior máximo	7,6 mm
Peso aproximado	98 kg/km

**Características eléctricas**

Tensión nominal de servicio U <sub>o</sub> /U	1.0/1.0 (1.2) kV AC 1.5/1.5 (1.8) kV DC
Operating Voltage V <sub>o</sub> DC	1500 V
Resistencia máxima del conductor en CC a 20° C	3,39 Ohm/km
Permissible current rating in air 60°C	70 A
Permissible current rating on a tray 60°C	67 A
Permissible short circuit current conductor 1s	0,8 kA

**Características de uso**

No propagador del incendio	EN 50575
No propagación de la llama	IEC 60332-1-2
Densidad de los humos	IEC 61034-2
Corrosividad de los gases	Baja IEC 60754-2
Resistencia a la intemperie	Excelente
Resistencia al ozono	EN 50396
Thermal endurance	IEC 60216-1-2
Temperatura ambiente de utilización (rango)	-40 ... 90 °C
Temperatura máxima operativa	120 °C
Temperatura máxima del conductor en corto-circuito	250 °C

**LIST OF CERTIFICATES**

NF EN 50618: BUREAU VERITAS LCIE licence 662568  
 IEC 62930: BUREAU VERITAS Certificate of conformity 158416-729944  
 Construction Product Regulation (CPR) Performance: B2ca-s1,d2,a1